

directly on rotating structural parts. This is the situation, for example, for torque determination, in which strain gauges are used to determine the torsion on the shaft resulting from the torque. On the one
5 hand, the rotating measurement device and signal processing require power, while on the other hand the measured value must be transmitted to the fixed part of the system. Further examples occur with the operation of magnetic bearings or the control of rotating field
10 windings.

According to the prior art, power and data are transmitted to rotating structural parts by means of sliprings with associated sliding contacts. This is
15 associated with the disadvantages which have already been mentioned further above. In particular for data transmission to rotating components, telemetry devices are known, although these are corresponding costly.

20 Accordingly, the object of the invention is to specify an improved method which can be used equally well for power and data transport, and to provide an associated apparatus.

25 According to the invention, the object is achieved by the measures in patent claim 1. An associated apparatus is provided by the features of patent claim 6. Developments of the method and of the apparatus are specified in the dependent method claims on the one
30 hand, and in the associated dependent apparatus claims on the other hand.

The invention provides an improved capability to transmit power on the one hand and data as information
35 on the other hand from fixed components of a system to moving components of the system, and to functional control devices there. This is advantageous in

particular for transport devices with a linear motor,
but can also be used for systems with rotating parts.